

WHAT IS CLAIMED IS:

1. An internal combustion engine comprising:
an electromagnetically driven valve that serves to drive one of an
intake valve and an exhaust valve;
5 a cam driven valve that serves to drive the other valve; and
at least two lubricating oil passages, one of the at least two lubricating
oil passages being formed to the electromagnetically driven valve independently from
the other lubricating oil passage.
2. The internal combustion engine according to claim 1, further
10 comprising:
a head section that includes the electromagnetically driven valve and
the cam driven valve;
a block section that includes a piston and a crankshaft connected
thereto;
15 a first lubricating oil passage to the head section including the
lubricating oil passage to the electromagnetically driven valve; and
a second lubricating oil passage to the block section, the second
lubricating oil passage being formed independently from the first lubricating oil
passage.
- 20 3. The internal combustion engine according to claim 1, wherein the
lubricating oil passage to the electromagnetically driven valve includes a lubricating
oil passage to the cam driven valve.
4. The internal combustion engine according to claim 1, wherein
lubricating oil supplied through the lubricating oil passage to the electromagnetically
25 driven valve has a different type from that of lubricating oil supplied through the other
lubricating oil passage.
5. The internal combustion engine according to claim 4, wherein the
lubricating oil supplied through the lubricating oil passage to the electromagnetically
driven valve has a viscosity different from that of the lubricating oil supplied through
30 the other lubricating oil passage.
6. The internal combustion engine according to claim 1, wherein the
lubricating oil passage to the electromagnetically driven valve and the lubricating oil
passage to the cam driven valve are independently formed.

7. The internal combustion engine according to claim 2, wherein the lubricating oil passage to the electromagnetically driven valve includes a lubricating oil passage to the cam driven valve.

5 8. The internal combustion engine according to claim 2, wherein lubricating oil supplied through the lubricating oil passage to the electromagnetically driven valve has a different type from that of lubricating oil supplied through the other lubricating oil passage.

10 9. The internal combustion engine according to claim 8, wherein the lubricating oil supplied through the lubricating oil passage to the electromagnetically driven valve has a viscosity different from that of the lubricating oil supplied through the other lubricating oil passage.

10. The internal combustion engine according to claims 2, wherein the lubricating oil passage to the electromagnetically driven valve and the lubricating oil passage to the cam driven valve are independently formed.

15 11. The internal combustion engine according to claim 2, wherein the lubricating oil passage to the electromagnetically driven valve, the lubricating oil passage to the cam driven valve, and the second lubricating oil passage to the block section are independently formed.

20 12. The internal combustion engine according to claim 11, wherein each of the lubricating oil supplied through the lubricating oil passage to the electromagnetically driven valve, the lubricating oil passage to the cam driven valve, and the second lubricating oil passage to the block section has a different type from one another.

25 13. The internal combustion engine according to claim 12, wherein each viscosity of the lubricating oil supplied through the lubricating oil passage to the electromagnetically driven valve, the lubricating oil passage to the cam driven valve, and the second lubricating oil passage to the block section is different from one another.